



**MASSACHUSETTS**  
**OPERATION STOREFRONT -1998-**

It's Time We Made Smoking History

## ACKNOWLEDGEMENTS

The Massachusetts Tobacco Control Program (MTCP) wishes to recognize the many participants in Operation Storefront who dedicated their time and efforts to the documentation of storefront advertisements within their local communities. Youth and adults from local boards of health, community coalitions, and other agencies funded through the Health Protection Fund, in addition to participants from non-funded agencies, were crucial in putting this comprehensive survey together.

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within the Bureau of Family and Community Health, which is directed by Deborah Klein Walker, Ed.D.

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### BACKGROUND

The tobacco industry spent over \$6 billion in 1993 on advertisements and promotions to attract and keep customers, particularly youth. The 1994 Surgeon General's Report on Youth and Smoking concluded that cigarette advertising appears to increase substantially the risk of young people smoking. A wealth of evidence demonstrates that tobacco manufacturers specifically target youth in their product advertising, and that youth are influenced by such marketing:

- Internal industry documents reveal a targeted campaign to capture the youth market.
- Brands smoked by youth are more heavily advertised in magazines with large youth readership than in other magazines.
- Non-smoking youth who can name a favorite brand advertisement are more susceptible to smoking uptake and are more likely to become smokers.



- High school students in Massachusetts

who own a promotional item (such as T-shirts, caps, or other 'gear') are more than twice as likely to smoke as those who do not.

### OVERVIEW

Massachusetts Operation Storefront, a study conducted by the Massachusetts Department of Public Health, was designed to assess the quantity and type of tobacco advertisements encountered by youth in storefront advertising during the course of their normal daily activities.

Participants in Operation Storefront— youth and adults from the Massachusetts Tobacco Control Program (MTCP) funded local programs and other non-funded agencies— surveyed more than **3,000** vendors in **125 Massachusetts** cities and towns with a combined population greater than **3,500,000**.

The survey results document the high levels of tobacco advertising to which our youth are exposed. These findings should encourage a voluntary reduction of tobacco advertisements and promotions by local shop owners and the adoption of policies to protect our youth.

### RESULTS

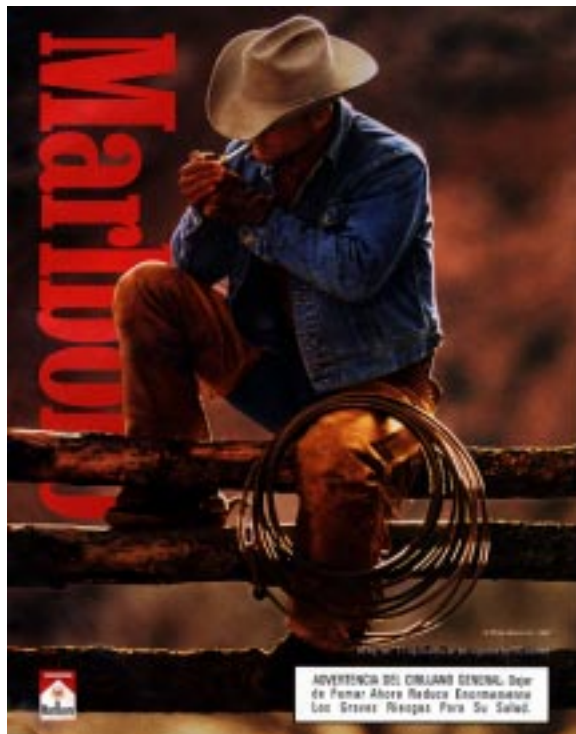
**Tobacco advertisements made up 52%** of the more than 20,000 advertisements visible to youth from outside retail establishments surveyed from February through April 1998.

**Convenience stores and gas stations—** where the majority of youth obtain cigarettes—displayed the largest proportion of tobacco advertising (55% of total advertisements). Pharmacies and drug stores displayed the smallest proportion of tobacco ads (6%), followed by department stores (9%), and grocery stores (30%).



**Brands smoked by youth** (Marlboro, Camel, Newport, Winston) were also the **most heavily advertised brands**, accounting for more than two-thirds of all tobacco ads.

Storefronts located **within 1000 feet of a school** were more likely to display more tobacco advertisements per retail vendor, and displayed more ads per vendor, than storefronts located farther



away from schools- **exposing children to approximately one-and-a-half times the tobacco advertising** they would otherwise encounter.

Establishments in **poorer communities** displayed much higher numbers of **tobacco ads per vendor (5)** in comparison to more affluent communities (3), as well as **a greater percentage of retail ads dedicated to tobacco (54%)**.

**Minority communities** — especially areas closer to schools — are subjected to a much higher proportion of tobacco advertising, accounting for more than one half of



all tobacco ads and only 40% of all other retail ads. **Menthol brands (Kool, Newport)** were 2-3 times more likely to be advertised in minority areas.

Storefronts that displayed some form of age or ID requirement had a lower percentage of tobacco advertisements.



## DISCUSSION

**Patterns of storefront tobacco advertising mirror patterns of youth purchasing.** Most youth buy cigarettes—and are most successful buying them—in convenience stores and gas stations, where the majority of cigarette advertisements are displayed. Retail merchant rates of illegal sales were highest for convenience stores and gas stations.

**The brands that are most heavily advertised mirror youth brand preferences.** Children are likely to smoke what they see advertised. The brands accounting for 93% of youth smoking in Massachusetts were also the four most displayed storefront brands, accounting for two-thirds of all tobacco advertisements.

**Tobacco advertising increases with proximity to schools.** Storefronts nearest to schools carry more tobacco advertising, display a greater percentage of tobacco ads, and are less likely to display age or ID requirements. While areas near schools have been declared drug-free, promotion of tobacco products in proximity to schools goes unchecked.

**Poorer children are more highly exposed to tobacco advertising,** as the industry concentrates advertising in poor and urban communities. As a result, poorer children may be at higher risk for tobacco use.

**Minority children are also more highly exposed, particularly to advertising for menthol brands** such as Newport and Kool. Seventy-three percent (73%) of black youth smokers and sixty-eight percent (68%) of Latino youth smokers smoke Newport. The predominance of tobacco advertising in minority areas is particularly disturbing in light of the recent national rise in minority youth smoking rates.

**The pervasiveness of tobacco advertising can have a profound impact on youth.** Young people consistently overestimate the number of adult and youth smokers. When more than half of retail advertisements are tobacco ads, this can distort the reality of overall smoking prevalence and normalize or glamorize smoking in the minds of youth.



## I. BACKGROUND

Tobacco products are among the most heavily advertised and widely promoted products in America.<sup>1</sup> Although tobacco advertising has been banned from television since 1971, the tobacco industry spent more than \$6 billion in 1993 alone on advertisements and promotions to attract and keep customers, through such diverse media as magazines, newspapers, outdoor and in-store advertising, point-of-purchase, direct mail, brand-identified non-tobacco items, and event sponsorship.<sup>1</sup> The Food and Drug Administration determined in its investigation of tobacco advertising that “young people are indeed exposed to substantial and unavoidable advertising and promotion [of tobacco products].”<sup>2,3</sup> This high exposure to tobacco advertising creates a climate of “friendly familiarity,” which may make tobacco products more appealing to youth.<sup>1</sup> Non-smoking youth who are able to name a favorite brand or brand advertisement are more susceptible to taking up smoking.<sup>4</sup> The 1994 Surgeon General’s Report on Youth and Smoking concluded that cigarette advertising appears to increase substantially the risk of young people smoking.<sup>5</sup>



The impact of advertising on youth smoking has been well documented. One study

found that even a brief exposure to tobacco advertising can create a favorable impression of smokers in young people.<sup>6</sup> Children, particularly adolescents, remember more about advertising images than adults.<sup>7</sup> These images appear to affect children’s perceptions of the pervasiveness, image, and function of smoking, which are directly related to smoking initiation. This may partly explain why children who smoke perceive uniformly higher smoking prevalence levels than children who do not smoke. In addition, a number of studies link an improvement in self-image to the messages promoted by a preferred brand of cigarettes.<sup>5</sup>



Recently released internal industry documents reveal a campaign targeting adolescent pre-smokers and smokers (see Appendix A). The importance of targeting youth is underscored in one document, which notes that 40 percent of regular smokers have made a loyal brand choice by age 18.<sup>8</sup> A study by the Centers for Disease Control and Prevention found that young people choose cigarettes on the basis of advertising rather than other factors, such as price or health information.<sup>9</sup> Young people smoke fewer brands than adults, and their choices can be directly related to the amount and kind of advertising of a given brand. In Massachusetts, the

four most heavily advertised brands (Marlboro, Newport, Winston, Camel) accounted for 93% of youth smoking.<sup>10</sup> By contrast, the most commonly smoked cigarettes nationwide among adult smokers are brandless or generic cigarettes.<sup>11</sup>

A number of separate studies have documented industry promotional campaigns directed at the youth market. Brands smoked by youth were found to be more heavily advertised in magazines with large youth readership than in other magazines.<sup>12</sup> Cartoon characters have also been used to sell cigarettes. In one study, children as young as 3 to 6 years old recognized the Joe Camel character and knew that he sold cigarettes.<sup>2</sup> Items such as T-shirts, jackets, and bags have been used to promote tobacco products. These were applauded in one industry report as “not only reach[ing] younger adult consumers, but convert[ing] younger adults into walking billboards.”<sup>13</sup> High school students in Massachusetts who own a promotional item are more than twice as likely to smoke. This points to the success of this strategy.<sup>14</sup>



## II. CAMPAIGN OVERVIEW

### What is Massachusetts Operation Storefront?

The Massachusetts Operation Storefront was conducted during the Spring of 1998 in order to raise awareness about the images that advertise and promote dependence on tobacco. Participants



from across the Commonwealth surveyed advertising visible from outside of local retail stores and other tobacco merchandisers in order to:

1. identify locations, quantities, and types of advertisements in storefront displays outside of retail stores
2. identify specific target areas—such as minority, non-English speaking, or high-poverty communities—where tobacco advertising may be more pervasive, or where specific brands and products may be more visible
3. compare types and amounts of advertising found near schools to advertising in other locations
4. compare tobacco advertising to other retail storefront advertising
5. explore differing patterns of advertising by geographic area and region
6. note where advertising appeal and youth preference may overlap



The results of this survey document the high levels of advertising to which youth are exposed. This campaign can encourage a voluntary reduction of tobacco advertisements and promotions by local shop owners and adoption of policies to protect youth.

### Who participated in Operation Storefront?

Both youth and adults from MTCP funded local programs and other non-funded agencies were invited to participate in surveys conducted across every region of the Commonwealth during the period from February through April 1998. Participation was voluntary, and levels of participation were extremely high, with more than 300 surveyors ranging from age six through adult.

- Participants in Operation Storefront surveyed a total of **125 Massachusetts cities or towns** (with 124 returning usable numeric data).
- The total population covered by participating cities and towns was greater than **3,500,000**—or approximately **58% of the Commonwealth**.
- More than **3000 vendors** were surveyed in all- including convenience stores (1194), gas stations (564), liquor stores (508), grocery stores (290), restaurants/bars (283), drug stores and pharmacies (242), and department stores (42).
- Approximately **70% of identified retail vendors** in the participating communities were surveyed.

### What did participants do?

Trained survey participants identified and mapped the tobacco vendors in their communities according to location, type of establishment, and distance from schools or playgrounds. All exterior/storefront advertising displayed by each vendor was recorded, according to the following categories:

- number of tobacco or other type of advertisement (alcohol or other)
- type of tobacco advertised (cigar, smokeless, or cigarette)
- brand of cigarette advertised (Marlboro, Camel, Winston, Kool, Newport, or other)
- location of display (windows/doors, building, sidewalk)



- primary language of the advertisement (English or non-English)
- presence of age or ID requirement, or other tobacco control message

In-store ads were not included in the survey. For each store surveyed, pictures of the exterior were taken as reference. All survey results were verified by a minimum of two people. All surveyors were required to undergo training prior to conducting the survey. In addition, a community profile was completed prior to par-

ticipation, which assessed the types of community activity undertaken, as well as the number and type of tobacco vendors in the community.

Data entry was performed by the Massachusetts Tobacco Control Program (MTCP), and analyses were conducted by the research and evaluation unit of MTCP.

#### **How was the collected information analyzed?**

Analyses were based on the data collected for retail stores, including convenience stores, gas stations/mini-marts, department stores, pharmacies/ drug stores, and grocery stores. Liquor stores and potential alcohol-serving establishments (restaurants, clubs) were excluded from analysis in order to facilitate comparability across communities. Often, these types of establishments are subject to state and local regulations governing alcohol sales, required distance from schools, and age requirements for entry, or are banned completely. Some Operation Storefront communities did not survey restaurant, bar, or private club advertisements. With the exception of bars, all vendors were represented in proportions similar to those obtained in two representative

samples of tobacco vendors conducted in 1996 and 1997.

All tobacco advertisements, all alcohol advertisements, and any displayed advertisements for other retail products were included in the analyses. The presence of an ID or age requirement (e.g. FDA, local signage, etc.) was also recorded. Regions were defined in accordance with the statewide regional structure adopted by the Massachusetts Department of Public Health. (See Appendix B)

Target areas were defined as follows:

- **high-poverty community**—greater than or equal to the state average for proportion of people with incomes below 200% of the federal poverty level (state average = 16.4%)
- **high-minority community**—greater than or equal to the state average for percent of minority population (state average = 11.9%)
- **size of community**—greater than or equal to 100,000 people; greater than or equal to 50,000 and less than 100,000; greater than or equal to 25,000 and less than 50,000; or less than 25,000
- **proximity to school**—vendor located within 1000 feet of a school

### III. CAMPAIGN RESULTS

#### Which vendors are displaying tobacco ads?

Tobacco advertisements made up 52% (10,665) of the more than 20,000 total retail advertisements surveyed for Massachusetts Operation Storefront. (Table 1, see Appendix C)

The greatest number of storefront displays (of all kinds) were found on or outside of convenience stores (13,253), gas stations (4,591), and grocery stores (2,423). (Fig 1, Table 2, see Appendix C)

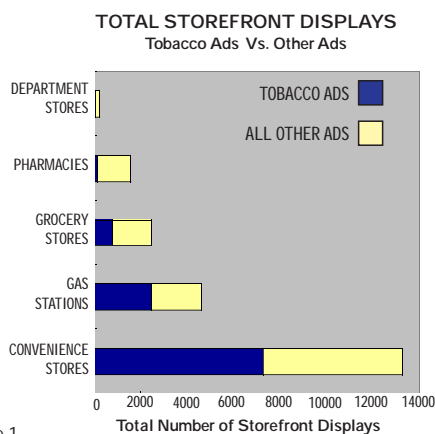


Figure 1

Convenience stores and gas stations were far more likely to display tobacco advertisements than other establishments. Fifty-five percent of both convenience store and gas station displays were tobacco advertisements. Pharmacies displayed the lowest percentage of tobacco ads (6%), followed by department stores (9%) and then grocery stores (30%). (Table 2, see Appendix C)

Retail store chains were less likely to advertise tobacco products than independently operated stores. With the exception of department stores, which showed no statistical difference, retail store chains displayed a smaller proportion of storefront tobacco advertising. (Figure 2)

#### PERCENTAGE OF TOTAL ADS DEDICATED TO TOBACCO

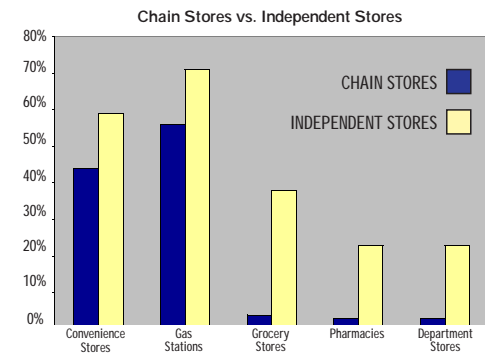


Figure 2

#### Which products are most heavily advertised?(Table 3, See Appendix C)

The four most popular brands among youth—Marlboro, Newport, Camel, and Winston—accounting for 93% of youth smoking, were also the four most heavily marketed brands in this survey.

The brands most heavily advertised were: Marlboro (3,547), unspecified brands (2,315), Winston (1,529), Newport (1,166), Camel (1,094), and Kool (763). Smokeless tobacco products (164) and cigars (87) were less likely to be advertised.

**Marlboro averaged 1 1/2 ads on every outdoor retail storefront surveyed.** Of the 4.57 tobacco ads averaged per retail storefront, Marlboro (1.52) accounted for one-third; Winston (0.65), Newport (0.5), and Camel (0.47), made up another third; with all other tobacco ads the final third (Figure 3).

#### PERCENTAGE OF RETAIL ADVERTISEMENTS, BY BRAND

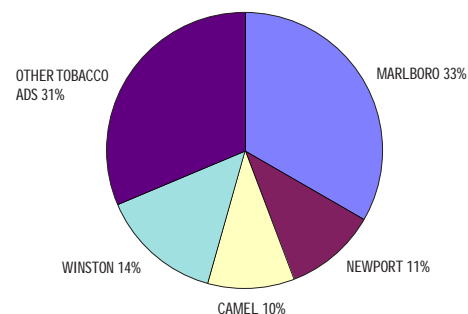


Figure 3



## Are areas near schools a target for tobacco advertising?

**Storefronts located within 1000 feet of a school were significantly more likely to display tobacco advertisements, and displayed more tobacco advertisements per vendor, than did storefronts located farther away from schools.\*\*\*** Fifty-four percent (54%) of retail ads near schools were for tobacco, while only 50% percent away from schools were tobacco ads. (Table 4, see Appendix C)

The average number of tobacco advertisements was 5.49 for stores near schools, and only 3.96\*\* for other stores—**exposing children to nearly one and a half times more tobacco displays during their daily activities.** (Figure 4)

Menthol brands of cigarettes were advertised more frequently near schools

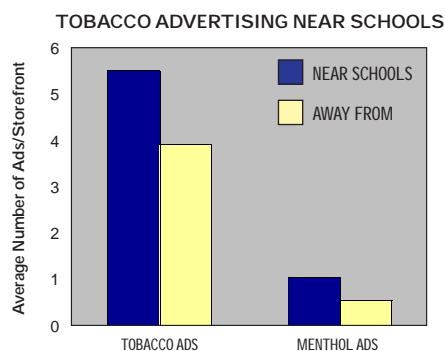


Figure 4

(820) than away from schools (725) in the community. (Table 4, see Appendix C) Retail establishments near schools averaged 1.15 menthol cigarette ads, nearly

twice that of other retail establishments farther away (0.66).\*\*\* (Figure 4)

The places where youth say that they buy cigarettes—convenience stores and gas stations—displayed a significantly greater average number of tobacco advertisements near schools (6.3) than away from schools (5.1)\*\* and were significantly less likely to display age/ID requirements near schools (34%) than away from schools (41%).\* (Table 5, see Appendix C)

## Which communities are most heavily targeted?

### HIGH POVERTY (TABLE 6, SEE APPENDIX C)

**Poorer communities displayed much higher numbers of tobacco ads per vendor, averaging 5 tobacco ads per retail vendor, in comparison with 3 ads/vendor for other communities.\*** Convenience stores in high-poverty areas displayed an even higher average of 6.5 tobacco ads for each retail vendor.

In addition, **poorer communities had a greater percentage of retail ads dedicated to tobacco.** Fifty-four percent (54%) of retail advertisements in poorer communities were retail tobacco ads, compared with 43% for more affluent communities.\*\*

All brands of cigarettes were advertised in much higher proportion in poorer communities. Nonetheless, **menthol brands were advertised almost exclusively in poor areas, with 94% of Newport ads and 92% of Kool ads displayed in high poverty communities.**

## MINORITY (TABLE 7 AND 8, SEE APPENDIX C)

The proportion of retail storefront advertising dedicated to tobacco was greater in high-minority communities (54%) than in low-minority communities (50%).\*

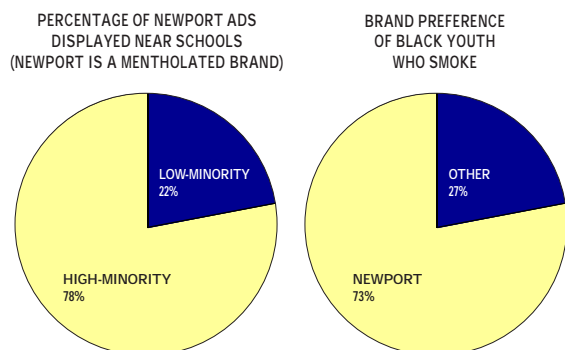


Figure 5

Menthol brands such as Newport and Kool, which are smoked by a majority of Massachusetts minority youth, were advertised in much greater proportion in high-minority communities. **Of the Newport ads displayed, 68% (greater than two-thirds) were found in high-minority communities.**

While only forty-eight percent (48%) of the total advertisements counted were located in high-minority areas, the total proportion of tobacco advertising found in high-minority communities was greater than fifty percent (52%). **More than half of cigarette brand advertising was found in high-minority areas.**

School areas in high-minority communities displayed an even greater percentage of tobacco brand advertisements. **Within 1000 feet of schools, 58% of all retail tobacco ads** were located in high-minority areas versus 42% in low-minority areas.

Brands preferred by minorities **were more likely to be displayed nearer to schools. Seventy-eight percent (78%) of Newport ads** displayed near schools were located in high-minority communities. (Figure 5)

Age or ID requirements were displayed on 30% of retail establishments in high-minority areas, versus 37% of establishments in low-minority areas.



SIZE OF COMMUNITY  
(TABLE 9, SEE APPENDIX C)

Urban communities displayed a much higher proportion of tobacco ads as a percentage of total retail ads (57%), compared with rural areas (47%).

Menthol brand advertisements were highly concentrated in urban areas, particularly those with a population greater than 100,000. The number of Newport ads per vendor was more than 3 times greater in highly urban areas than in very rural communities.

Advertisements for Camel, Kool, and Marlboro were relatively high in mid-sized cities (50,000-100,000). **Camel ads were displayed with twice the frequency in mid-sized cities** as they were elsewhere (0.77 ads/vendor.)

Retail establishments in the most rural communities (25,000 or less) displayed high levels of ads for cigars, smokeless tobacco, and the unspecified brands of cigarettes. While accounting for only 25% of sample population, rural communities displayed **56% of smokeless tobacco ads and 38% of cigar ads.**

How do different regions  
of Massachusetts compare?  
(Tables 10 & 11)

Figure 6 depicts the percentage that each region contributed to the total surveyed vendors. This can be compared with the percentage of the Commonwealth's total population represented by each region provided in the following regional descriptions.

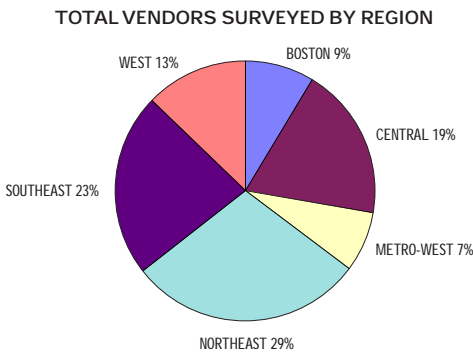


Figure 6

**BOSTON REGION**

*(11.9% of Commonwealth population; 80% of regional communities participated, representing 54.5% of regional population)*

The Boston Region showed a disproportionately high concentration of ads for all youth brands of cigarettes. In particular, menthol brands such as Kool and Newport—traditionally marketed to minority communities—were advertised two-three times more in Boston proportionately than in the rest of the Commonwealth. Most tobacco advertising was found on or outside of convenience stores (82%). A disproportionately high level of gas station ads (75%) and grocery store ads (59%) were tobacco ads.

**CENTRAL REGION**

*(12.6% of Commonwealth population; 23% of regional communities participated, representing 55.6% of regional population)*

The Central Region had a high number of total retail ads, with proportionately fewer tobacco ads. However, both cigars and smokeless tobacco products were most heavily advertised in this region. A high proportion of the region's tobacco ads were displayed in gas stations (34%).



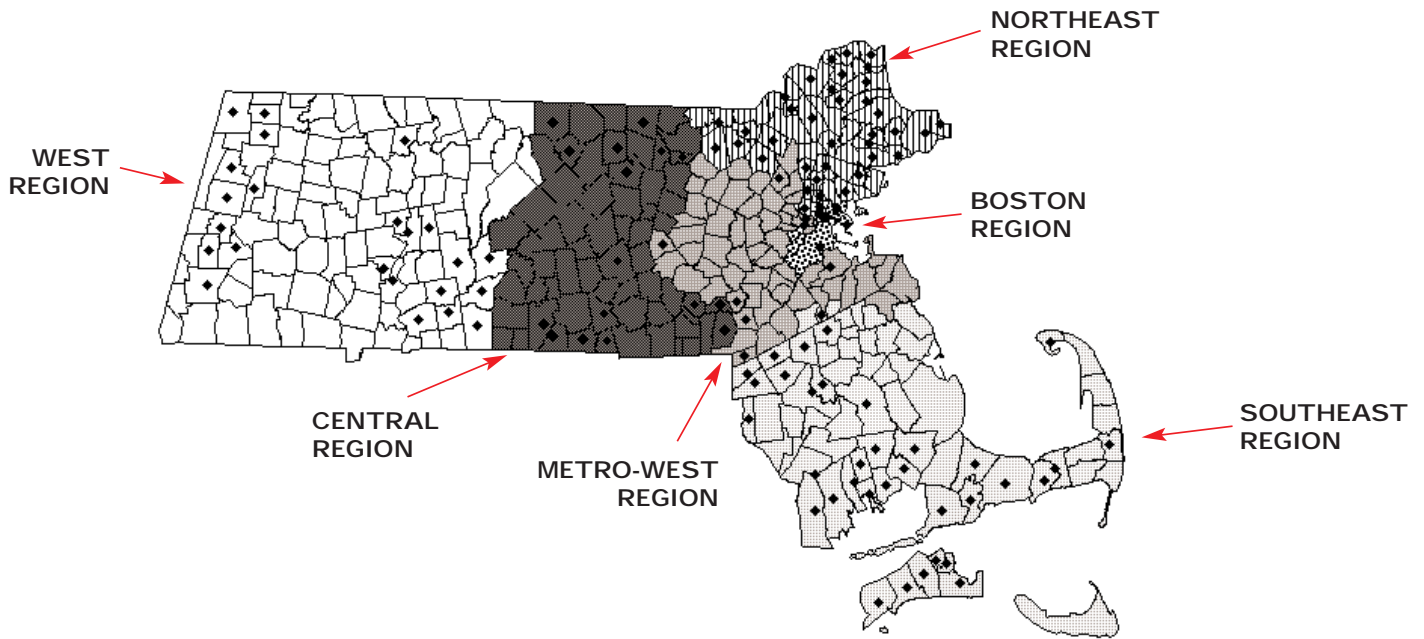


Figure 7

#### **METRO-WEST REGION**

*(23.4% of Commonwealth population; 13% of regional communities participated, representing 22.4% of regional population)*

The Metro-West Region was particularly dominated by Camel and Winston ads (0.77 and 0.71 ads/ vendor). Tobacco ads made up a relatively small proportion of overall ads (42%). Only 16% of grocery store ads were tobacco ads-slightly more than half the statewide average.

#### **NORTHEAST REGION**

*(19.6% of Commonwealth population; 76% of regional communities participated, representing 81.8% of regional population)*

The Northeast Region displayed high overall numbers of ads for the brands related to youth smoking-Marlboro, Newport, Winston, Camel. Due to the high levels of participation in the region, the Northeast made up a more significant portion of the overall sample relative to its population. Advertising patterns in

this region were similar to the patterns for the Commonwealth as a whole.

#### **SOUTHEAST REGION**

*(18.8% of Commonwealth population; 50% of regional communities participated, representing 65.7% of regional population)*

The Southeast Region revealed a heavy proportion of Kool and Winston ads compared with other regions, as well as a high number of ads for unspecified brands of cigarettes. Cigar advertisements were displayed more frequently than in other areas. Similar to the Central Region, a large proportion of total tobacco advertisements were located in gas stations (32%).

#### **WEST REGION**

*(13.6% of Commonwealth population; 25% of regional communities participated, representing 56.5% of regional population)*

The West Region had twice as many Newport ads as any other brand (except Marlboro), and the highest number of

unspecified brands displayed. Smokeless tobacco was most advertised in this region, averaging 0.1 ads/ vendor. Gas stations displayed a high proportion of the total retail tobacco advertisements (36%).

- All regions displayed high proportions of Marlboro ads relative to other brands.
- The Boston and Northeast regions were least likely to display an ID or age requirement, and displayed a proportionately greater number of tobacco ads.

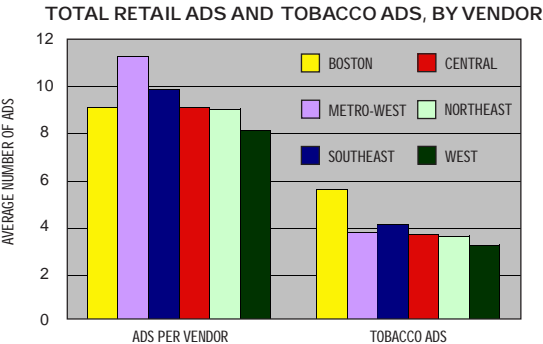


Figure 8

#### IV. DISCUSSION

The results of Operation Storefront, a statewide survey of more than 3000 retail outlets that sell tobacco products in Massachusetts, document the high levels of storefront tobacco advertising to which youth in general are exposed in the Commonwealth. More than half of the 20,000

retail ads surveyed in the study were for tobacco products. Overall, patterns of storefront advertising mirror youth purchasing patterns and brand preferences. The majority of ads were displayed in convenience stores and gas stations, stores in which most youth purchase cigarettes and where illegal sales to young people are highest. <sup>10</sup>

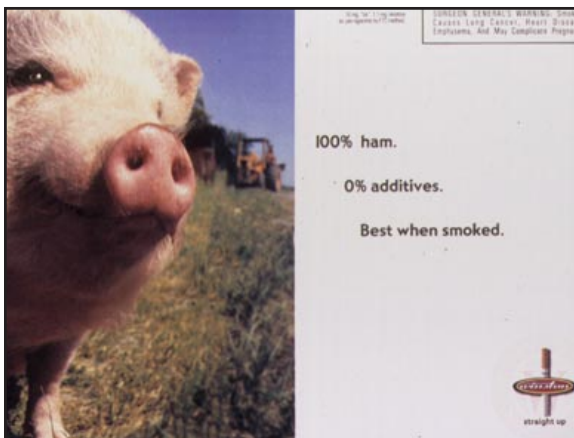
Children are more likely to smoke the products that they see advertised. <sup>1</sup> Therefore, it is not surprising that the cigarette brands that account for the majority (93%) of youth smoking (Marlboro, Newport, Camel, and Winston) were also the four most commonly displayed storefront brands. <sup>10</sup>



While storefront advertising of tobacco products is generally pervasive, there is a striking increase with proximity to schools. Stores where youth buy their cigarettes that are located nearest to schools display more tobacco advertising and a greater percentage of tobacco ads, and are also less likely to display age or ID requirements. This type of situation, which was prevalent in the Boston and Northeast regions, is



particularly alarming because youth exposed to tobacco advertising are more likely to be influenced to attempt to buy a product—and succeed in making the purchase—if there is no obvious deterrent. The creation of drug-free zones around schools is paradoxical in view of



the fact that the purchase of tobacco products by minors, and hence nicotine addiction, continues unchecked. The posting of an age or ID requirement correlated with proportionately reduced advertising.

Storefront tobacco advertisements were also more prevalent in poor and urban communities. In minority areas, the aggressive advertising of menthol cigarettes is specifically targeted at black and Latino youth, the majority of whom smoke menthol brands such as Kool and Newport.<sup>10</sup> Retail establishments in most rural areas demonstrate a unique pattern of storefront advertising, displaying high levels of ads for cigars, smokeless tobacco, and the unspecified brands of cigarettes.

The pattern of advertising and promotion of tobacco products in neighborhood storefronts documented by this study is part of a deliberate campaign

by the tobacco industry to attract young potential smokers and influence their brand choices once they begin smoking. There are numerous internal corporate documents pertaining to this subject, which reveal that the industry regards children and adolescents as its primary source of replacement smokers and has developed a variety of sophisticated promotional strategies aimed at capturing the youth market. (see Appendix A) A statewide storefront tobacco advertising study conducted in California in 1994 revealed results similar to those of the Massachusetts survey,<sup>15</sup> and provides further evidence of industry efforts to target youth through this strategy, which is more than likely operating on a national scale. In addition to aggressively promoting tobacco products in storefront advertising, manufacturers target youth with hats, T-shirts, and other non-tobacco promotional "gear." This insidious merchandising strategy not only attracts young customers, but as one R.J. Reynolds report phrased it, effectively turns them into "walking billboards," that lure still more youth into the smoking habit.<sup>13</sup> It is apparently highly



successful, for high school students in Massachusetts who own a pro



motional item are more than twice as likely to smoke.<sup>14</sup>

Manufacturers not only direct their advertising at youth as a whole, but also target specific groups within this population, such as the less affluent and minorities. As a result, these children may be at higher risk for tobacco use. The predominance of tobacco advertising in minority areas is particularly disturbing in light of the recent national rise in minority youth smoking rates.<sup>16</sup>

The impact of tobacco advertising on youth cannot be understated. That it has a profound influence in encouraging children, especially adolescents, to begin smoking is well documented by the 1994 Surgeon General's report and numerous additional studies.<sup>1,5</sup> Youth consistently overestimate the number of smokers.<sup>1</sup> When more than half of retail advertisements are tobacco ads, this can distort young people's perception of the reality of overall smoking prevalence by normalizing or glamorizing smoking in their minds. Furthermore, the corporate literature reveals that manufacturers of tobacco products are aware that

advertising has a powerful impact on the existing peer pressure within this age group to smoke, and in setting standards of conformity with regard to brand preferences. Measures to curtail the amount and type of advertisement that youth are exposed to can be a powerful tool in reducing the susceptibility of youth to smoking.

This survey cannot be considered representative of the Commonwealth. Community participation was voluntary, and the Metro-west region was underrepresented while the Northeast region was overrepresented. Nonetheless, with over one-third of all estimated tobacco vendors in the Commonwealth surveyed, and with the remaining regions each covering slightly more than 50% of their community population, it is likely that Operation Storefront provides a good estimate of youth exposure to storefront advertising in Massachusetts. These results may offer a conservative estimate of exposure, as the overrepresented region falls below the state average in terms of tobacco ads per vendor, while the underrepresented region is over the state average.

\* P<0.05

\*\* P<0.01

\*\*\* P<0.001

**It's time we made smoking history.**

## ENDNOTES

1. Food and Drug Administration. Regulations Restricting the Sale and Distribution of Cigarettes and Smokeless Tobacco to Protect Children and Adolescents; Final Rule. Federal Register. August 28, 1996. 61(168): 44396-44618.
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"At the outset it should be said that we are presently, and I believe unfairly, constrained from directly promoting cigarettes to the youth market... Realistically, if our Company is to survive and prosper, over the long term we must get our share of the youth market. In my opinion, this will require new brands tailored to the youth market..."

*Research Planning Memorandum on Some Thoughts About New Brands of Cigarettes for the Youth Market—R.J. Reynolds, Memorandum by CE Teague, February 2, 1973 (Mangini Trial Exhibit 2)*

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"Marlboro's phenomenal growth rate in the past has been attributable in large part to our high market penetration among young smokers [15-19 years-old]... [M]y own data, which includes younger teenagers, shows even higher Marlboro market penetration among 15-17 year-olds."

"The teenage years are also important because those are the years during which most smokers begin to smoke, the years in which initial brand selections are made, and the period of the life-cycle in which conformity to peer-group norms is greatest."

*The Decline in the Rate of Growth of Marlboro Red—Philip Morris, Correspondence from Myron Johnston to Dr. R. B. Seligman, May 21, 1975 (Minnesota Trial Exhibit 2557)*

"Today's teenager is tomorrow's potential regular customer, and the overwhelming majority of smokers first begin to smoke while still in their teens... The smoking patterns of teenagers are particularly important to Philip Morris... the share index is highest in the youngest group for all Marlboro and Virginia Slims packings... At least a part of the success of Marlboro Red during its most rapid growth period was because it became the brand of choice among teenagers who then stuck with it as they grew older..."

"We will no longer be able to rely on a rapidly increasing pool of teenagers from which to replace smokers lost through normal attrition... Because of our high share of the market among the youngest smokers, Philip Morris will suffer more than the other companies from the decline in the number of teenage smokers."

*Young Smokers: Prevalence, Trends, Implications, and Related Demographic Trends—Philip Morris, Report by Myron Johnston, March 31, 1981 (Minnesota Trial Exhibit 10339)*

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"Kool has shown little or no growth in share of users in the 26+ age group... Growth is from 16-25 year olds. At the present rate, a smoker in the 16-25 year age group will soon be three times as important to Kool as a prospect in any other broad age category."



"KOOL'S stake in the 16-25 year old population segment is such that the value of this audience should be accurately weighted and reflected in current media programs. As a result, all magazines will be reviewed to see how efficiently they reach this group and other groups as well."

*Brown and Williamson, Correspondence from RL Johnson to RA Pittman, February 21, 1973 (Minnesota Trial Exhibit 13820)*

"[C]omic strip type copy might get a much higher readership among younger people than any other type of copy."

*Cigarette Product Formulation—R.J. Reynolds, Meeting Notes, April 12, 1973 (Mangini Trial Trial, Exhibit 8)*

"[A]ny desired additional nicotine 'kick' could be easily obtained through pH regulation."

*Cigarette Concept to Assure RJR a Larger Segment of the Youth Market—R.J. Reynolds, Memo by Frank Colby, December 4, 1973 (Minnesota Trial Exhibit 12464)*

"They represent tomorrow's cigarette business. As this 14-24 age group matures, they will account for a key share of the total cigarette volume-for at least the next 25 years."

*1975 Marketing Plans Presentation—R.J. Reynolds, September 30, 1974 (Minnesota Trial Exhibit 12493)*

"Our profile taken locally shows this brand being purchased by black people (all ages), young adults (usually college age), but the base of our business is the high school student."

*Lorillard, Memo from TL Achey to Curtis Judge, August 30, 1978 (Minnesota Trial Exhibit 10195)*

"Younger adult smokers have been the critical factor in the growth and decline of every major brand and company over the last 50 years. They will continue to be just as important to brands/companies in the future for two simple reasons: The renewal of the market stems almost entirely from 18 year old smokers. No more than 5% of smokers start after age 24. [And] the brand loyalty of 18 year old smokers far outweighs any tendency to switch with age... Brands/companies which fail to attract their fair share of younger adult smokers face an uphill battle. They must achieve net switching gains every year to merely hold share..."

"Younger adult smokers are the only source of replacement smokers...If younger adults turn away from smoking, the Industry must decline, just as a population which does not give birth will eventually dwindle."

*Younger Adult Smokers: Strategies and Opportunities*—R.J. Reynolds, Strategic Research Report, February 29, 1984 (Mangini Trial Exhibit 32)

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"We are not sure that anything can be done to halt a major exodus if one gets going among the young. This group follows the crowd, and we don't pretend to know what gets them going for one thing or another. Certainly Philip Morris should continue efforts for Marlboro in the youth market, but perhaps as strongly as possible aimed at the white market rather than attempting to encompass blacks as well."

*A Study of Smoking Habits Among Youth Smokers*—Philip Morris, Report by Roper Organization, Inc., July 1974 (Minnesota Trial Exhibit 10497)

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"Smoking a cigarette for the beginner is a symbolic act... 'I am no longer my mother's child,' 'I'm tough,' 'I am an adventurer,' 'I'm not a square'... As the force from the psychological symbolism subsides, the pharmacological effect takes over to sustain the habit..."

*Why One Smokes*—Philip Morris, Draft Report, Fall/1969 (Minnesota Trial Exhibit 3681)

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"Evidence is now available to indicate that the 14 to 18 year old group is an

increasing segment of the smoking population. RJR-T must soon establish a successful new brand in this market if our position in the industry is to be maintained over the long term."

*Planning Assumptions and Forecast for the Period 1977-1986+ for R.J. Reynolds Tobacco Company*—R.J. Reynolds, Draft report by Claude Teague, April 15, 1976 (Mangini Trial Exhibit 6)

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"Overall, Camel advertising will be directed toward using peer acceptance/influence to provide the motivation for target smokers to select Camel... convincing target smokers that by selecting camel as their usual brand they will project an image that will enhance their acceptance among their peers."

"[A]dvertising will create the perception that Camel smokers are non-conformist, self-confident and project a cool attitude which is admired by their peers... This approach will capitalize on the ubiquitous nature of Marlboro by repositioning it as the epitome of conformity, versus Camel the smoke of the cool/in-group."

*Camel New Advertising Campaign Development*—R.J. Reynolds, Memorandum from RT Caufield to DN Iauco, March 12, 1986 (Mangini Trial Exhibit 58)

"I have just received data on the graduating class of 1982 and the results are much more encouraging and corroborate the Roper data [a survey that tracked smoking trends]... These data show that smoking prevalence among these 18 year old high school seniors has increased from 1981 to 1982."

*Still More Trends in Cigarette Smoking Prevalence—Philip Morris, Memorandum by Myron Johnston, February 18, 1983 (Minnesota Trial Exhibit 10525)*

"To ensure increased and longer-term growth for CAMEL FILTER, the brand must increase its share penetration among the 14-24 age group which have a new set of more liberal values and which represent tomorrow's cigarette business."

*Recommendation to Expand 'Meet the Turk' Ad Campaign—R.J. Reynolds, Memo from JW Hind, January 23, 1975 (Mangini Trial Document 13)*

"Long after the adolescent preoccupation with self-image has subsided, the cigarette will even preempt food in times of scarcity on the smokers' priority list."

"The act of smoking is symbolic, it signifies adulthood, he smokes to enhance his image in the eyes of his peers. But the psychosocial motive is not enough to explain continued smoking."

*Smoker Psychology Research—Philip Morris, Memorandum by M Wakeham, November 26, 1969 (Minnesota Trial Exhibit 10299)*

"[Jack Daniel's] is an example of a viable positioning, executed in a 'nonstandard' but authentic and unpretentious way, which not only reached YA [young adult] consumers but converted YA's into walking billboards."

*Younger Adult Smokers—R.J. Reynolds, Presentation, 1987 (Mangini Trial Exhibit 35)*

"Thus, a tobacco product is, in essence, a vehicle for delivery of nicotine designed to deliver the nicotine in a generally acceptable and attractive form. Our industry is then based upon design, manufacture, and sale of attractive dosage forms of nicotine, and our Company's position in our Industry is determined by our ability to produce dosage forms of nicotine which have more overall value, tangible or intangible, to the consumer than those of our competitors."

*RJR Confidential Research Planning Memorandum on the Nature of the Tobacco Business and the Crucial Role of Nicotine Therein—RJ Reynolds, Memorandum by CE Teague, April 14, 1972 (Mangini Trial Exhibit 48)*

## APPENDIX B: MASSACHUSETTS COMMUNITIES BY REGION

**Boston Region:** Boston\*, Brookline, Chelsea\*, Revere\*, Winthrop\*

**Central Region:** Ashburnham, Ashby, Auburn, Ayer\*, Barre, Bellingham, Berlin, Blackstone, Bolton, Boylston, Brimfield, Brookfield, Charlton, Clinton, Douglas, Dudley\*, East Brookfield, Fitchburg\*, Franklin\*, Gardner\*, Groton, Hardwick, Harvard, Holden, Holland, Hopedale, Hubbardston, Lancaster, Leicester, Leominster\*, Lunenburg, Medway\*, Mendon, Milford\*, Millbury, Millville, New Braintree, North Brookfield, Northbridge, Oakham, Oxford\*, Paxton, Pepperell, Princeton, Rutland, Shirley\*, Shrewsbury, Southbridge\*, Spencer, Sterling, Sturbridge\*, Sutton, Templeton, Townsend\*, Upton, Uxbridge, Wales, Warren, Webster, West Boylston, West Brookfield, Westminster, Winchendon\*, Worcester\*

**Metro-West Region:** Acton, Arlington, Ashland, Bedford, Belmont, Boxborough, Braintree, Burlington\*, Cambridge\*, Canton, Carlisle, Cohasset, Concord, Dedham, Dover, Foxborough, Framingham, Hingham, Holliston, Hopkinton, Hudson, Hull, Lexington, Lincoln, Littleton, Marlborough, Maynard, Medfield, Millis\*, Milton, Natick, Needham, Newton, Norfolk\*, Northborough\*, Norwell, Norwood, Plainville\*, Quincy\*, Randolph, Scituate, Sharon, Sherborn, Somerville\*, Southborough, Stow, Sudbury, Walpole, Waltham, Watertown, Wayland, Wellesley, Westborough, Weston, Westwood, Weymouth, Wilmington, Winchester, Woburn, Wrentham

**Northeast Region:** Amesbury\*, Andover, Beverly\*, Billerica\*, Boxford, Chelmsford\*, Danvers, Dracut, Dunstable, Essex\*, Everett\*, Georgetown\*, Gloucester\*, Groveland\*, Hamilton\*, Haverhill\*, Ipswich\*, Lawrence\*, Lowell\*, Lynn\*, Lynnfield\*, Malden\*, Manchester\*, Marblehead, Medford\*, Melrose\*, Merrimac\*, Methuen\*, Middleton\*,

Nahant, Newbury\*, Newburyport\*, North Andover\*, North Reading, Peabody, Reading\*, Rockport\*, Rowley\*, Salem\*, Salisbury\*, Saugus, Stoneham\*, Swampscott, Tewksbury\*, Topsfield, Tyngsborough\*, Wakefield\*, Wenham\*, West Newbury\*, Westford\*

**Southeast Region:** Abington, Acushnet\*, Attleboro\*, Avon\*, Barnstable\*, Berkley, Bourne, Brewster, Bridgewater, Brockton\*, Carver, Chatham, Chilmark\*, Dartmouth\*, Dennis\*, Dighton, Duxbury, East Bridgewater, Eastham, Easton\*, Edgartown\*, Fairhaven\*, Fall River\*, Falmouth\*, Freetown, Gay Head\*, Gosnold, Halifax, Hanover, Hanson, Harwich, Holbrook, Kingston, Lakeville, Mansfield\*, Marion\*, Marshfield, Mashpee\*, Mattapoisett\*, Middleborough\*, Nantucket, New Bedford\*, North Attleborough\*, Norton\*, Oak Bluffs\*, Orleans\*, Pembroke, Plymouth, Plympton, Provincetown\*, Raynham\*, Rehoboth, Rochester\*, Rockland, Sandwich\*, Seekonk\*, Somerset, Stoughton, Swansea, Taunton\*, Tisbury\*, Truro, Wareham\*, Wellfleet, West Bridgewater, West Tisbury\*, Westport\*, Whitman, Yarmouth\*

**West Region:** Adams\*, Agawam, Alford, Amherst\*, Ashfield, Athol, Becket, Belchertown\*, Bernardston, Blandford, Buckland, Charlemont, Cheshire, Chester, Chesterfield, Chicopee, Clarksburg, Colrain, Conway, Cummington, Dalton\*, Deerfield, East Longmeadow, Easthampton\*, Egremont, Erving, Florida, Gill, Goshen, Granby, Granville, Great Barrington\*, Greenfield\*, Hadley\*, Hampden, Hancock, Hatfield\*, Hawley, Heath, Hinsdale, Holyoke\*, Huntington\*, Lanesborough\*, Lee\*, Lenox\*, Leverett, Leyden, Longmeadow, Ludlow\*, Middlefield, Monroe, Monson\*, Montague, Monterey, Montgomery, Mount Washington, New Ashford, New Marlborough, New Salem, North



## APPENDIX B: MASSACHUSETTS COMMUNITIES BY REGION

Adams*, Northampton, Northfield, Orange, Otis, Palmer*, Pelham, Peru, Petersham, Phillipston, Pittsfield*, Plainfield, Richmond, Rowe, Royalston, Russell, Sandisfield, Savoy, Sheffield, Shelburne, Shutesbury, South Hadley, Southampton, Southwick, Springfield*, Stockbridge*, Sunderland, Tolland, Tyngham, Ware*, Warwick, Washington,	Wendell, West Springfield, West Stockbridge, Westfield, Westhampton, Whately, Wilbraham*, Williamsburg, Williamstown*, Windsor, Worthington  * indicates that community participated in Operation Storefront
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## APPENDIX C: TABLES

**Table 1:** Retail Establishment Summary

**Table 2:** Operation Storefront Summary

**Table 3:** Establishment Summary with Means

**Table 4:** Distance to School Retail Establishment Summary

**Table 5:** Operation Storefront Distance to School Comparison

**Table 6:** Poverty Population Retail Establishment Summary

**Table 7:** Minority Population Retail Establishment Summary

**Table 8:** Operation Storefront Summary Minority Comparison

**Table 9:** Retail Population Comparison

**Table 10:** Regional Retail Summary

**Table 11:** Operation Storefront Summary by Region